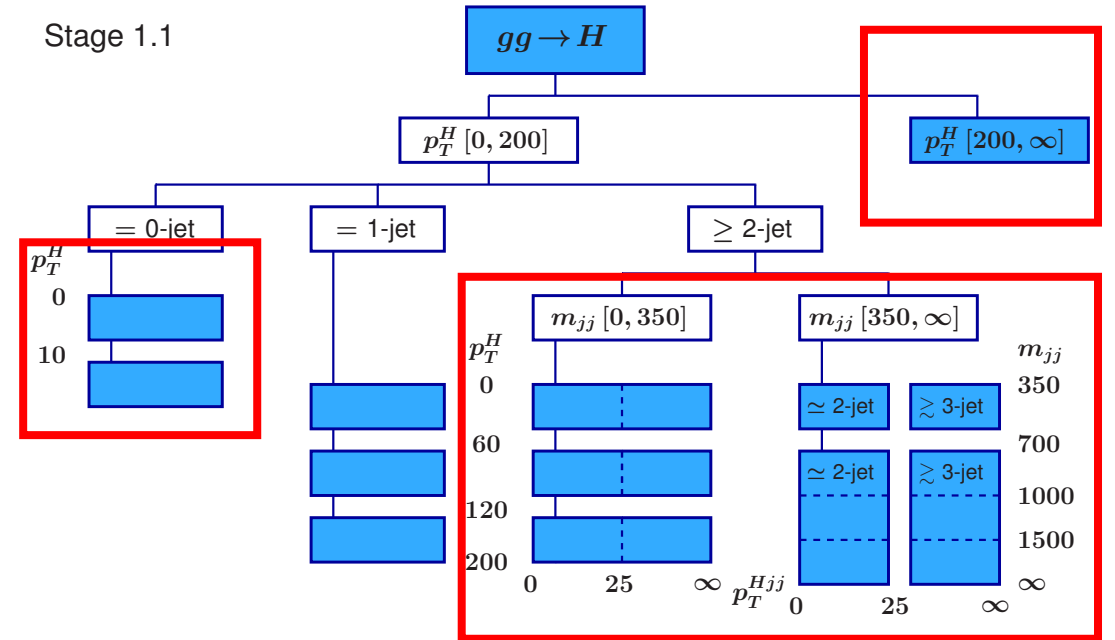
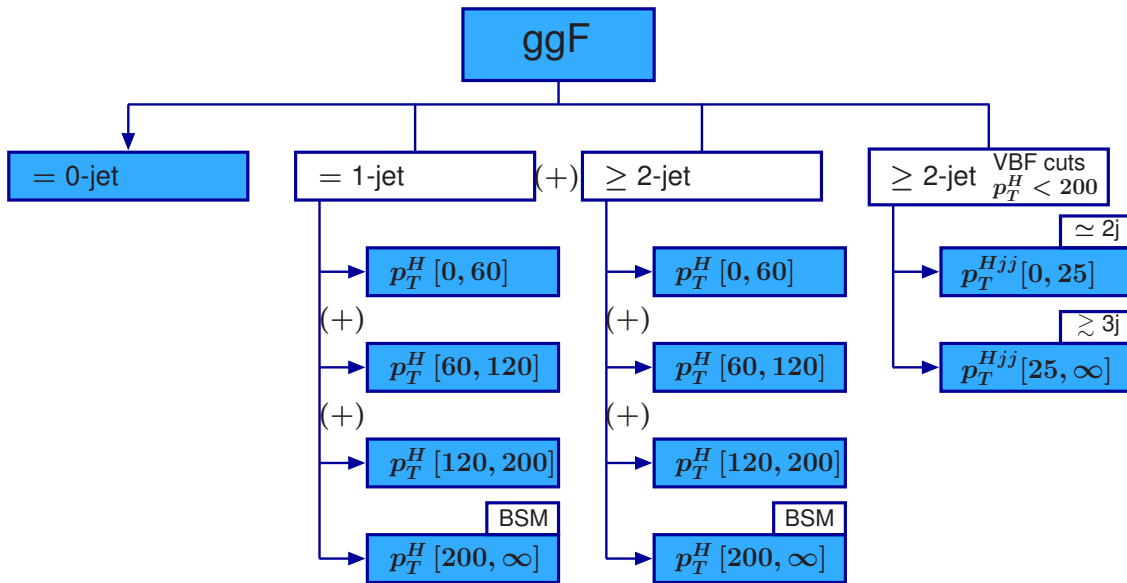


Short introduction

Kathrin Becker, 15.05.19

Going from Stage 1 to Stage 1.1

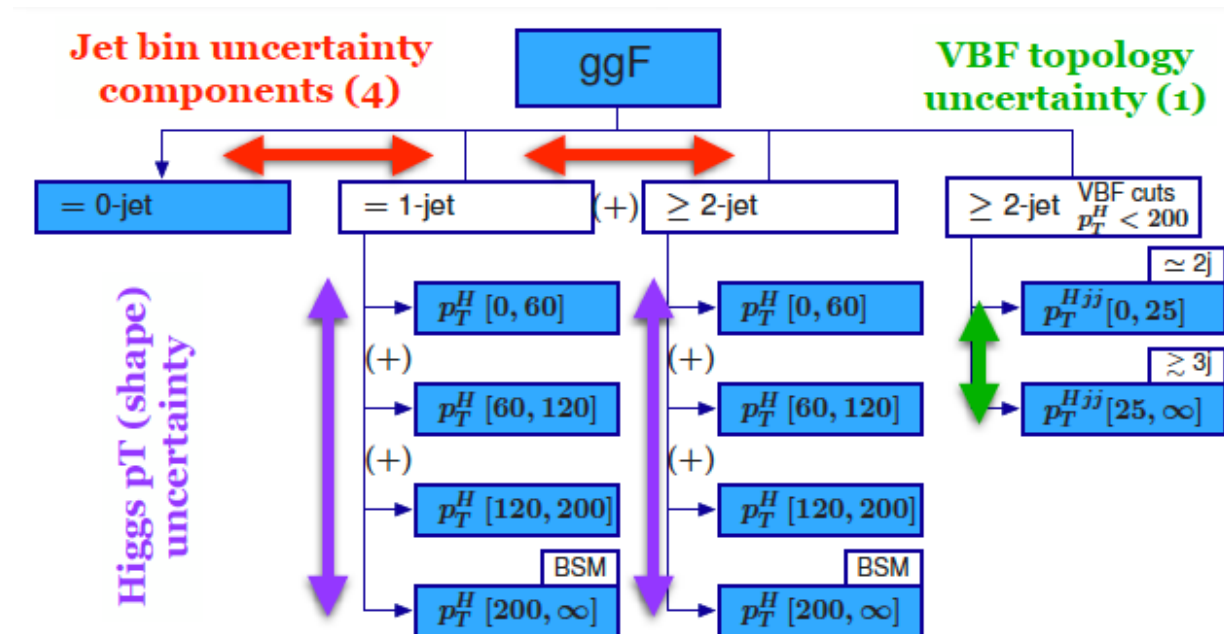


- New Rivet tool available:

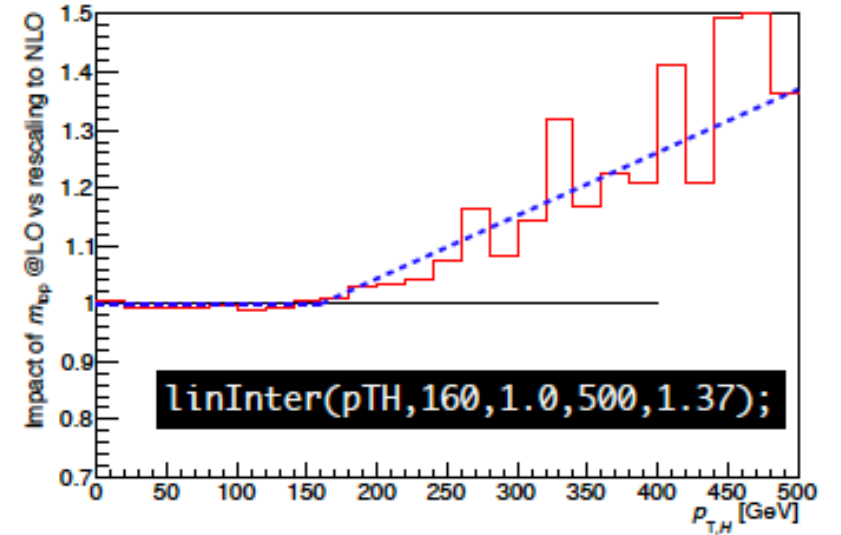
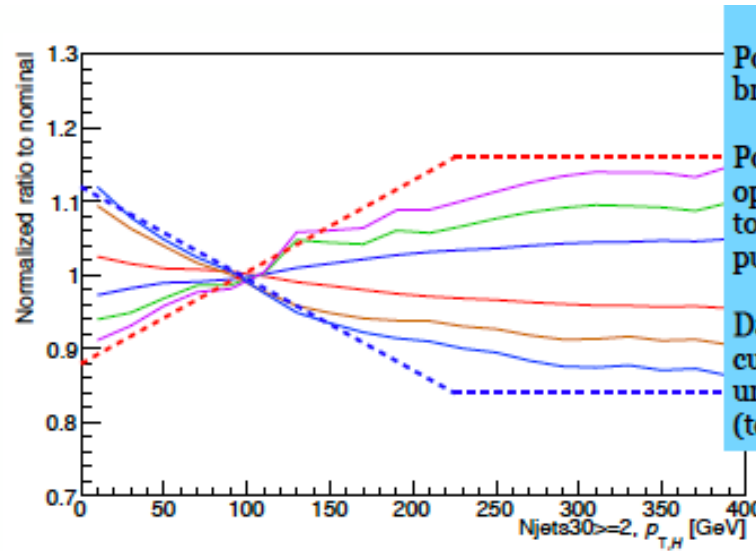
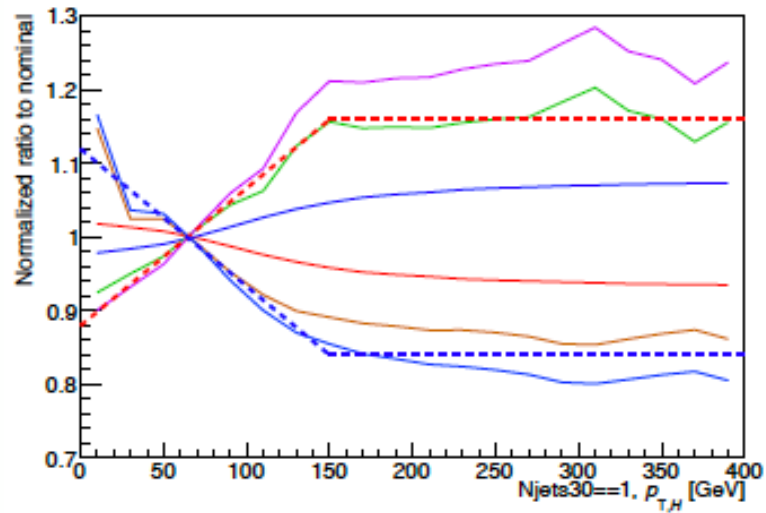
<https://gitlab.cern.ch/LHCHIGGSXS/LHCHXSWG2/STXS>

Old uncertainty scheme - Inputs

- pTH: Uncertainties taken from Powheg NNLOPS (QCD scales, mtop)
 - Could use this again for new pTH bin
- Njets: Use BLPTW scheme (for 0, 1, $\geq 2j$)
 - Can stay probably the way it is
- VBF cuts: only jet binning (pTHjj) uncertainty applied derived with QCD scales from MCFM, cross check with GoSam
 - Now we have dependency on mjj, pTHjj
 - Should probably treat mjj like pTH
 - Suggestion: Derive uncertainty numbers using Madgraph5_aMC@NLO with up to 2 jets at NLO



Old uncertainty scheme – Example pTH



- QCD scales and m_{top} from old scheme

Talks from Dag on old scheme

- https://indico.cern.ch/event/581691/contributions/2373167/attachments/1371942/2081220/WG1_meeting_towards_ggF_uncertainty_presentation.pdf
- https://indico.cern.ch/event/618048/contributions/2519117/attachments/1428957/2193875/WG1_March16_2017.pdf